



Grizzly bear, (*Ursus arctos horribilis*)

A symbol of America's wildlands, the grizzly or brown bear is one of the largest North American land mammals. The grizzly bear's historic range covered much of North America from the mid-plains westward to California and from central Mexico north throughout Alaska and Canada. Today, the grizzly bear is found in only about 2 percent of its original range in the lower 48 states.

Grizzly bears need a very large home range (50 to 300 square miles for females; 200 to 500 square miles for males), encompassing diverse forests interspersed with moist meadows and grasslands in or near mountains. In the spring, bears usually range at lower elevations and go to higher altitudes for winter hibernation.

Larger than the black bear, male grizzly bears stand about 7 feet tall and weigh from 300 to 600 pounds (and occasionally more than 800). Females are smaller, usually weighing between 200 and 400 pounds. Although a standing grizzly is commonly perceived to be a threatening pose, bears stand when they are simply curious or surveying their surroundings. Otherwise they generally remain on all fours.

Unlike the black bear, the grizzly bear has a rather concave face, high-humped shoulders, and long, curved claws. The grizzly's thick fur, which varies from light brown to nearly black, sometimes looks frosty-looking, hence the name "grizzly," or the less common "silvertip." The grizzly has shorter, rounder ears than the black bear.

Except for mating and caring for the young, grizzly bears primarily lead solitary lives, spending most of their time foraging, or looking for food. The grizzly is North America's largest omnivore, meaning it eats both plants and other animals. About 80 to 90 percent of the grizzly's food is green vegetation, wild fruits and berries, nuts, and bulbs or roots of certain plants. Grizzlies also eat a great deal of insects, sometimes tearing rotten logs apart and turning over heavy stones in search of the insects themselves or their larvae.

Most of the meat in the grizzly's diet comes from animal carcasses, or carrion, of big game animals, although it will sometimes prey on elk or moose calves or smaller mammals. For grizzlies along the west coast of Canada and in Alaska, salmon is an important food source.

The grizzly bear must eat enough to store huge amounts of fat needed to sustain it through its long winter sleep. The grizzly's ability to eat large quantities of rich food and store fat without suffering from heart disease or cholesterol problems is of great interest to medical scientists. If scientists can determine how grizzlies accomplish this, that information may be useful in preventing human heart disease.

At the top of the food chain, adult grizzly bears have little to fear from other wild animals. Grizzly cubs may fall prey to mountain lions, wolves, and other bears if they stray too far from their mother.

Early in the fall, grizzly bears begin looking for a proper place to dig their dens, and may travel many miles before finding a suitable area. Generally, they seek a high, remote mountain slope where deep snow will lie until spring to serve as insulation. Grizzlies often dig beneath the roots of a large tree to create their dens. Obstructing roots are chewed up, and loose rocks and earth are thrust through the narrow entrance by the powerful strokes of the grizzly's forepaws.

The grizzly bear will generally enter its den in October or November. During the next 5 to 6 months, the grizzly will get no water or nourishment of any kind but will use up its accumulated fat.

Male grizzly bears usually emerge from the den in March or April, while females emerge in late April and May. When a grizzly comes out of its den, the first food is sometimes carrion from animals that did not survive the winter. A grizzly will usually travel to lower elevations to reach vegetated areas. Mating season is from June through July. Grizzly bear embryos do not begin to develop until the mother begins her winter hibernation, although mating may have taken place up to 6 months before. As with other bears, if the mother has not accumulated enough fat to sustain herself as well as developing cubs, the embryos may not implant (develop).

In January, usually one to three cubs, each weighing only a pound or less, are born. The cubs gain weight quickly and often have reached 20 pounds by the time they come out of the den.

Cubs remain dependent upon their mother's milk for almost a year, stay with their mother for to 2 to 3 years, and reach breeding maturity at about 4 1/2 to 5 1/2 years. In some cases they may not breed until 8 1/2 years of age. When they do reach breeding age, females only breed every 3 or more years. Males compete with each other for breeding opportunities and seek females each year. Grizzlies usually live to be 15 to 20 years of age, and a few survive for up to 30 years.

Between 1800 and 1975, grizzly bear populations in the lower 48 states decreased from estimates of more than 50,000 to less than 1,000. The grizzly was eliminated from much of the West by the late 1800s. As mountainous areas were settled, development contributed to an increase in human-caused mortality. Livestock depredation control, habitat deterioration, commercial trapping, unregulated hunting, and the perception that grizzlies threatened human life were leading causes of the animal's decline.

In 1975, the U.S. Fish and Wildlife Service listed the grizzly bear as a threatened species under the Endangered Species Act, meaning it is considered likely to become endangered ("endangered" means a species is considered in danger of extinction within all or a significant portion of its range). Many of the current threats to the survival of grizzly bears are associated with degradation of habitat due to rural or recreational development,

road building, and energy and mineral exploration. Habitat destruction in valley bottoms and riparian areas is particularly harmful to grizzlies because they use these linkage habitats to travel from one area to another when they are searching for food. Some private landowners and companies are trying to help grizzlies by voluntarily protecting grizzly linkage habitats.

Some grizzly bears are accidentally killed by hunters who mistake them for black bears, which are legal game. But the biggest threat to the grizzly is human-caused mortality. Grizzlies become habituated to humans because of what biologists call "attractants," which include garbage, pet foods, livestock carcasses, and improper camping practices. This can eventually lead to conflicts between people and bears -- not only in populated areas of the grizzly's range but also in back country recreation sites.

Today, in the lower 48 states, grizzlies can be found in Wyoming, Montana, Idaho, and Washington. The six ecosystems in the conterminous U.S. identified by biologists as containing suitable habitat for grizzly bears are Yellowstone (northwestern Wyoming, southwestern Montana, and eastern Idaho), Northern Continental Divide (northwestern Montana), the Cabinet-Yaak (northwestern Montana, Selkirks (Idaho and eastern Washington), the North Cascades (Washington) and Bitterroot (central Idaho and western Montana).

There are roughly 400 grizzlies living in the Northern Continental Divide Ecosystem, about 600 in or around Yellowstone National Park, about 40 to 50 in the Selkirk Mountains in northern Idaho and northeast Washington, another 30 to 40 in the Cabinet-Yaak ecosystem in northern Idaho and western Montana, and less than 20 in the North Cascades. There are no known grizzly bears in the Bitterroot Ecosystem at this time. In Alaska, where they are called brown bears, they are estimated to number more than 30,000. There are about 22,000 grizzly bears in Canada.

The grizzly bear recovery effort has been met with some successes thus far. Grizzlies in the Yellowstone ecosystem have met or exceeded recovery targets since 1998. We know less about the grizzlies in the Northern Continental Divide ecosystem but a project finishing in 2006 there will give us a better idea in this ecosystem. We still have much to do to reach recovery in this ecosystem.

These successes have been largely due to a cooperative effort among several organizations called the Interagency Grizzly Bear Committee. Established in 1983, the committee includes the USDA-Forest Service, National Park Service, U.S. Geological Survey, U.S. Fish and Wildlife Service, Bureau of Land Management, state agencies in Montana, Wyoming, Idaho, and Washington, and the Provinces of British Columbia and Alberta. The committee coordinates habitat management, research, and education and outreach for the grizzly bear.

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